

Appl. No.: 09/869,745
Response to Office communication of: 4/10/2003
docket no.: DEXNON/095/PC/US

REMARKS

Claims 22, 29 and 34 have been amended. The amendments are supported by the specification and claims. Claim 23 has been cancelled. No claims have been added. Upon entry of the amendment claims 22 and 24-44 will be pending in the application.

The rejection of claim 22-36 under 35 U.S.C. §112, second paragraph.

Claims 22-36 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. More particularly, the Office communication states that: "it is unclear what nonwoven webs would possess a lower cross direction wet expansion when compared to a similar web material comprising only the same cellulosic fibers because the Applicant has not set forth a comparative value in the claim."

As an initial matter is not clear why the presence of a comparative value will make claims 22-36 more definite.

Claim 22 recites: "A nonwoven web material comprising cellulosic fibres and synthetic fibres, . . .". Claim 22 is clearly directed to a nonwoven web material comprising both cellulosic fibers and synthetic fibers. Claim 22 goes on to recite, with bracketed text added: "wherein the {cellulosic fiber and synthetic fiber} web material exhibits lower cross direction wet expansion than a similar web material comprising only the same cellulosic fibres." This recitation is a comparison of the properties of the inventive cellulosic and synthetic fiber web material to a different web material comprising only cellulosic fibers and without the synthetic fibers.

The legal precedent on claim language is summarized MPEP §2173.01. That section states:

"A fundamental principal contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted meanings in the art. Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for

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which protection is sought. As noted by the court in In re Swinehart, 160 USPQ 226 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which protection is sought."

Further, as stated by the Court in Miles Laboratories Inc. v. Shandon Inc., 27 USPQ2d 1123, 1126 (Fed. Cir. 1993), "If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, §112 demands no more."

The Examiner correctly interpreted claim 22 as being directed to a web material comprising both cellulosic and synthetic fibers. Thus, it would appear that claim 22 is definite enough to satisfy MPEP §2173.01 and 35 U.S.C. §112, second paragraph. Claims 29 and 34 use similar language and are similarly definite. Applicant would consider any suggestions from the Examiner on how to further clarify these claims.

The rejection of claims 22, 24-25 and 28-36 under 35 U.S.C. §102(b) or §103(a).

Claims 22, 24-25 and 28-36 were rejected under 35 U.S.C. §102(b) as having each and every feature and interrelationship anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over, International publication WO 95/10190 to Rose et al.

Claim 23 was NOT rejected as anticipated or obvious over the Rose reference. In fact page 7 of the Office communication admits that the synthetic fibers of claim 23 are NOT found in the Rose reference. The synthetic fibers of claim 23 have been incorporated into independent claims 22, 29 and 34 so that those claims, and claims dependent therefrom, are also NOT anticipated by or obvious over the Rose reference. Claims 22, 24-25 and 28-36 are patentable for at least this reason.

Claim 22 recites in one pertinent part: "wherein the web material exhibits lower cross direction wet expansion than a similar web material comprising only the same cellulosic fibres." As discussed in Applicant's specification on pages 1-2, wet expansion refers to the phenomenon of expansion of the web material on rewetting.

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The Rose reference at page 5, first and second paragraphs, teaches that cross direction stretch of the Rose nonwoven material is controlled by impregnating or applying liquid polymer dispersions to a web material. The Rose reference goes on to state, with bracketed text added: "The ability to control stretch in this way {by saturating the web with a liquid polymer dispersion} is an important feature of the invention." There is NO teaching or suggestion in the Rose reference that the cross direction wet expansion of a nonwoven material can be lowered by the addition of synthetic fibers. There is no teaching or suggestion that the "cross direction stretch" of Rose is the same as, or related to, cross direction wet expansion. Claims 22, 24-25 and 28-36 are patentable for at least this reason.

As stated in MPEP §2144.04(b), the omission of an element and retention of its function is an indicia of unobviousness. Arguendo, if the Examiner contends that the "cross direction stretch" of Rose is the same as cross direction wet expansion then Applicant's improvement of web material cross direction wet expansion without use of the specific Rose EVA material and process is a further indication of the unobviousness of Applicant's claims. Claims 22, 24-25 and 28-36 are patentable for at least this reason.

- **Claim 25 is patentable for additional reasons.**

Claim 25 recites: "The web material of claim 22 in which the cellulosic fibres include woodpulp fibres in an amount of up to 50% by weight of a total weight of cellulosic and synthetic fibres." Thus claim 25 requires the presence of (include) woodpulp fibers. The Office communication on page 4 acknowledges that a wood pulp component is present in claim 25. The Office communication on page 4 admits that the Rose reference only IMPLIES "the presence of 0% wood pulp". The IMPLIED presence of NO (0%) wood pulp does NOT meet the acknowledged requirement of claim 25 that some wood pulp be present in the nonwoven material. Applicant respectfully traverses the rejection of claim 25 and asserts it should be withdrawn. Claim 25 is patentable for

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at least this additional reason.

- **Claim 29 is patentable for additional reasons.**

Claim 29 recites in one pertinent part: "A method for lowering cross direction wet expansion of a nonwoven web material comprising: mixing cellulosic and synthetic fibres selected from at least one of polyamide fibres, polyamide copolymer fibres, polyester fibres, polyester copolymer fibres, polyolefin fibres and polyolefin copolymer fibres; and forming the mixed fibres into the nonwoven web . . ." As discussed above there is NO teaching or suggestion in the Rose reference that the cross direction wet expansion of a nonwoven material can be lowered by the addition of synthetic fibers. There is no teaching or suggestion that the "cross direction stretch" of Rose is the same as, or related to, cross direction wet expansion. Claim 29, and claims dependent therefrom, are patentable for at least this additional reason.

- **Claim 30 is patentable for additional reasons.**

Claim 30 recites: "The method of claim 29 wherein the cellulosic fibres include woodpulp fibres in an amount of up to 50% by weight of a total weight of cellulosic and synthetic fibres." Thus claim 30 requires the presence of (include) woodpulp fibers. The Office communication on page 4 acknowledges that a wood pulp component is present in claim 25. The Office communication on page 4 admits that the Rose reference only IMPLIES "the presence of 0% wood pulp". The IMPLIED presence of NO (0%) wood pulp does NOT meet the requirement of claim 30 that some wood pulp be present in the nonwoven material. Applicant respectfully traverses the rejection of claim 30 and asserts it should be withdrawn. Claim 30 is patentable for at least this additional reason.

The rejection of claims 26 and 27 under 35 U.S.C. §103(a).

Claims 26 and 27 were rejected under 35 U.S.C. §103(a) as being obvious over the above-discussed reference of Rose.

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Claim 22 has been amended as discussed above so that claim 22, and claims 26 and 27 depending from claim 22, are not obvious over the Rose reference, and therefore patentable for at least this reason.

- **There is no suggestion or motivation to modify the Rose reference.**

A reference that teaches away from a claimed invention does not provide the suggestion or motivation needed to anticipate or make obvious a claimed invention. In fact, the courts have stated that a reference that teaches away from a claimed invention is an indication of the nonobviousness of that invention. "A reference, however, must have been considered for all it taught, disclosures that diverged and taught away from the invention at hand as well as disclosures that pointed towards and taught the invention at hand." Ashland Oil, Inc. v. Delta resins & Refractories, Inc., 227 USPQ 657, 666 (Fed. Cir. 1985). "One important indicium of nonobviousness is 'teaching away' from the claimed invention by the prior art." In re Braat, 16 USPQ2d 1813, 1814 (Fed. Cir. 1990). The prior art reference must be considered in its entirety, including portions that would lead away from the claimed invention. See MPEP 2141.02.

The Rose reference teaches that a particularly suitable paper composed of natural cellulosic fibers may be saturated with a liquid EVA dispersion and thereby affect cross direction stretch. This explicit teaching in Rose is away from the Applicant's claimed use of about 0.5% to about 20% by weight of synthetic fibers. Claim 26 is not obvious over the Rose reference and is patentable for at least this additional reason. Claim 27 recites similar features and is additionally patentable for similar reasons.

- **The communication reliance on the cited Boesch case is misplaced.**

The Office communication, apparently attempting to address the fact that the synthetic fiber ranges in Applicant's claims and the Rose reference do not overlap, states:

It should be noted that the amount of cellulosic and synthetic fibers in the substrate are result effective variables; for example, as the amount of cellulosic fibers increases, the web will become more paper-like. As the

amount of synthetic fiber increases, the substrate will become more heat stable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to Rose, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have been motivated to optimize the level of cellulosic and synthetic fibers to create a substrate with properly balanced elasticity, thermal stability and strength.

The citation referred to in the communication, at 205 USPQ 215, 219 (CCPA 1980), states:

[1] In the above-quoted passage from '838, we note that lowering the N_v value of a Co-Cr-Ni alloy and depletion of the metals not consumed in precipitation from the N_v calculation are expressly suggested. Considering, also, that the composition requirements of the claims and the cited references overlap, we agree with the Solicitor that the prior art would have suggested "the kind of experimentation necessary to achieve the claimed composition, including the proportional balancing described by appellants' N_v equation." This accords with the rule that discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art.

Thus, the decision in the Boesch case relied on 1) the cited reference "expressly" suggesting the relationship between the variable and the result; 2) the claimed ranges and cited reference ranges overlapping; and 3) the prior art suggesting "the kind of experimentation necessary to achieve the claimed composition . . . described by appellants. The facts of the present situation are completely different from the facts of Boesch.

- There is no teaching or suggestion in Rose that synthetic fiber concentration effects cross direction wet expansion. The Rose reference DOES teach that impregnating a preferred natural cellulose web material with a liquid dispersion of a polymer and subsequent crosslinking of the polymer affects cross direction stretch.
- The Rose reference does not appear to provide ANY guidance as to the amount of synthetic fibers used. In fact, the Rose reference states at page 4, third

paragraph that "particularly suitable papers are composed only of natural cellulosic fibers". Thus, the Rose reference fairly teaches away from using synthetic fibers.

- The Rose reference does not teach or suggest use of synthetic fibers at about 0.5% to about 20% as recited in Applicant's claims. There is no overlap between Applicant's claimed synthetic fiber amounts and any teaching or suggestion in the Rose reference.
- Given the teaching in Rose that impregnating a preferred natural cellulose web material with a liquid dispersion of a polymer and subsequent crosslinking of the polymer affects cross direction stretch (Rose, page 5, first and second paragraphs) a person of ordinary skill would be taught away from "the kind of experimentation necessary to achieve the claimed composition" of Applicant's.

Applicant traverses the communication statement that "the amount of cellulosic and synthetic fibers in the fibrous web are result effective variables" under Boesch in view of the contrary teachings of the cited Rose reference.

As stated by the courts in In re Lee, 61 USPQ2d, 1430 (Fed. Cir. 2002):

The determination of patentability on the ground of unobviousness is ultimately one of judgment. In furtherance of the judgmental process, the patent examination procedure serves both to find, and to place on the official record, that which has been considered with respect to patentability. [When] the examiner and the Board . . . rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record. The failure to do so is not consistent with either effective administrative procedure or effective judicial review. The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.

If the Examiner maintains the position that "the amount of cellulosic and synthetic fibers in the fibrous web are result effective variables", the Examiner is respectfully requested to provide a specific statement supporting this assertion. If this statement by the Examiner is not found in the cited prior art reference(s), and is instead based on the

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knowledge of the Examiner, then the Examiner is requested to supply an affidavit conforming to 37 C.F.R. §1.104(d)(2).

The rejection of claims 23 and 37-44 under 35 U.S.C. §103(a).

Claims 23 and 37-44 were rejected under 35 U.S.C. §103(a) as being obvious over the above discussed reference of Rose in view of U.S. Patent No. 5,705,214 to Ito et al.

Claim 23 has been cancelled obviating this rejection with respect to that claim.

As stated in MPEP §2143, to establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

• There is no suggestion or motivation to modify the Rose reference.

The Rose reference explicitly teaches at page 4, third paragraph that: "The web's constituent fibres should also exhibit uniform formation and absorbency characteristics. The Rose reference goes on to teach that absorbent fibers, particularly natural cellulosic fibers (pp 4), are "particularly suitable" for use in the process therein where the liquid EVA copolymer dispersion (pp 5) is absorbed by the web to control stretch. Thus the Rose reference explicitly teaches that the fibers used in that web material should have "uniform absorbency" and more particularly that natural cellulosic fibers should be used. The synthetic fibers of the Ito reference will have different absorbency characteristics from the natural fibers of Rose. Modifying the Rose process to use the synthetic fibers of Ito is contrary to the explicit teachings in the Rose reference. Ito is also silent as to why this teaching in Rose should be modified. Claims 37 and 42, and claims dependent therefrom, are patentable for at least this reason.

- **There is no expectation of success in modifying the Rose reference.**

The Rose reference teaches at page 4 therein that the fibers making up that web should have uniform absorbency so that the liquid polymer dispersions will be absorbed by the web. Adding the synthetic fibers of Ito, which have a different absorbency from the natural fibers of Rose, is contrary to the teachings of Rose. A person of ordinary skill in the art would have no expectation of success in modifying the Rose material as proposed in the Office communication. Claims 37 and 42, and claims dependent therefrom, are patentable for at least this reason.

- **The Rose reference teaches away from modification as proposed in the Office communication.**

A reference that teaches away from a claimed invention does not provide the suggestion or motivation needed to anticipate or make obvious a claimed invention. In fact, the courts have stated that a reference that teaches away from a claimed invention is an indication of the nonobviousness of that invention. “A reference, however, must have been considered for all it taught, disclosures that diverged and taught away from the invention at hand as well as disclosures that pointed towards and taught the invention at hand.” Ashland Oil, Inc. v. Delta resins & Refractories, Inc., 227 USPQ 657, 666 (Fed. Cir. 1985). “One important indicium of nonobviousness is ‘teaching away’ from the claimed invention by the prior art.” In re Braat, 16 USPQ2d 1813, 1814 (Fed. Cir. 1990). The prior art reference must be considered in its entirety, including portions that would lead away from the claimed invention. See MPEP 2141.02.

The Rose reference explicitly teaches at page 4, third paragraph that: “The web’s constituent fibres should also exhibit uniform formation and absorbency characteristics. The Rose reference goes on to teach that absorbent fibers, particularly natural cellulosic fibers (pp 4), are “particularly suitable” for use in the process therein where the liquid EVA copolymer dispersion (pp 5) is absorbed by the web to control stretch. Thus, the Rose reference explicitly teaches away from adding synthetic fibres having different absorbency characteristics from the natural fibers of Rose. Ito is also silent as to why

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this teaching in Rose should be modified. Claims 37 and 42, and claims dependent therefrom, are patentable for at least this reason.

Claim 39 is patentable for additional reasons.

Claim 39 recites: "A casing paper according to claim 37 in which the cellulosic web includes woodpulp fibres in an amount of up to 50% by weight of a total weight of cellulosic and synthetic fibres." Thus claim 39 requires the presence of (include) woodpulp fibers. The Office communication on page 7 acknowledges that some wood pulp component is present in claim 39. The Office communication on page 7 admits that the Rose reference only IMPLIES "the presence of 0% wood pulp". The IMPLIED presence of NO (0%) wood pulp does NOT meet the requirement of claim 39 that some wood pulp be present in the nonwoven material. Applicant respectfully traverses the rejection of claim 39 and asserts it should be withdrawn. Claim 39 is patentable for at least this additional reason.

• **Claims 40 - 41 are patentable for additional reasons.**

Applicant's claims 40 and 41 recite synthetic fiber contents that are not taught or suggested by either the Rose or Ito references. In fact the Rose reference teaches that natural cellulosic webs are "particularly suitable". Similarly, the Ito reference does not teach or suggest the claimed synthetic fiber ranges. Claims 40 and 41 are not obvious over the Rose or Ito references, singly or in combination and are patentable for at least this additional reason.

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In summary, Applicants have addressed each of the objections and rejections within the present Office Action. It is believed the application now stands in condition for allowance, and prompt favorable action thereon is respectfully solicited.

The Examiner is invited to telephone Applicant(s)' attorney if it is deemed that a telephone conversation will hasten prosecution of this application.

Respectfully submitted,

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